



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,848	11/22/2000	Brad A. Armstrong		3944

7590 12/05/2001
Brad A. Armstrong
P.O. Box 1419
Paradise, CA 95967

EXAMINER

CHOW, DOON Y

ART UNIT	PAPER NUMBER
----------	--------------

2675

DATE MAILED: 12/05/2001

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/721,848

Applicant(s)
Armstrong

Examiner
Dennis-Doon Chow

Art Unit
2675



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Nov 22, 2000

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-25 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-25 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 1 and 2

20) ☐ Other: _____

Art Unit:

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chandler (4,246,452), in view of applicant's admitted prior art and Culver (6256011).

Chandler discloses an image controller comprising: an input member (22) with associated sensors; a plurality of finger depressible buttons (28) with associated sensors; and a flexible sheet connecting the sensors of the input member and the sensors of the buttons (Fig. 4).

Chandler does not disclose how the finger depressible buttons are made, and the use feedback means.

Figure 38 and page 46, line 28 to page 47, line 12 describes the finger depressible buttons which applicant has admitted as being prior art and is now claiming.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the finger depressible buttons of Figure 38 in Chandler because the depressible buttons of applicant's admitted prior art provide more features than Chandler's depressible buttons.

Culver discloses an image controller comprising feedback means for providing vibration to be felt by a hand of an user.

Art Unit:

It would have been obvious to one of ordinary skill in the art to Culver's feedback means in Chandler's controller because the feedback means provides real feeling of controlling an object on a display screen.

3. Claims 3, 5, 6, 8, 9-13, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chandler in view of Culver.

Chandler discloses an image controller comprising: an input member (22) with associated sensors; a plurality of finger depressible buttons (28) with associated sensors; and a flexible sheet connecting the sensors of the input member and the sensors of the buttons (Fig. 4).

Chandler does not disclose the use feedback means.

Culver discloses an image controller comprising feedback means for providing vibration to be felt by a hand of an user.

It would have been obvious to one of ordinary skill in the art to Culver's feedback means in Chandler's controller because the feedback means provides real feeling of controlling an object on a display screen.

4. Claims 4, 7, 14, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chandler in view of Culver as applied to claims 3, 5, 6, 8, 9-13, and 15-18 above, and further in view of applicant's admitted prior art.

Art Unit:

Chandler does not disclose how the finger depressible buttons are made, and the use feedback means.

Figure 38 and page 46, line 28 to page 47, line 12 describes the finger depressible buttons which applicant has admitted as being prior art and is now claiming.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the finger depressible buttons of Figure 38 in Chandler because the depressible buttons of applicant's admitted prior art provide more features than Chandler's depressible buttons.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Loper.

Loper discloses an input system for controlling a three dimensional image on display device, comprising: a handle; converter means for converting hand inputs into electrical outputs; and tactile feedback means for providing vibration to be felt by a hand of an operator (abstract), wherein the feedback means having a motor, a shaft and offset weight.

Art Unit:

7. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loper.

Loper does not disclose controlling three dimensional viewpoints and three dimensional objects on the display device, as required in claim 13. However, it is well known in the art to use a six degrees of freedom input system for controlling three dimensional viewpoints and three dimensional objects on a display device. Therefore, it would have been obvious to one of ordinary skill in the art to convert Loper's input system into a six degrees of freedom input system so that a reality image can be generated.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is (703) 3-54398.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras, can be reached at (703) 305-9720

Any response to this action should be mailed to:

commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology center 2600 only)

Hand-delivered response should be brought to:

Crystal Park II, 2121 Crystal Drive

Serial Number: 09/522,787

Page 6

Art Unit:

Arlington, VA. Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)306-0377.

D. Chow
AU. 2675
November 26, 2001


DENNIS-DOON CHOW
PRIMARY EXAMINER